Improving the Quality of Early Childhood Education through Flipped Classroom Approach and SWOT Evaluation

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Abstract. *The community service program at KB-TK Aisyiyah Wonoayu aims to improve the quality of early childhood education by integrating the flipped classroom model and SWOT analysis for institutional development. The implementation method includes problem identification, socialization, training of principals and teachers, application of technology, mentoring, and evaluation. It begins with a SWOT analysis to identify the strengths, weaknesses, opportunities, and threats of the school, which guides the design and implementation of the flipped classroom approach tailored to the needs of the school. Teachers are drilled to develop open modules based on flippedclassroom that allow students to learn at home through videos and engage in interactive classroom activities. The results of the study showed a 100% increase in the performance of the principal, marked by the success of the SWOT analysis and the revision of the school's vision and mission. In addition, 90% of teachers experienced an increase in the development of teaching modules and the use of AI technology and flipped classroom applications. The sustainability of this program is expected to support principals in preparing the 2025/2026 school program and maintaining the flipped classroom as an effective learning strategy, thereby increasing school competitiveness.*

Abstrak. Program pengabdian kepada masyarakat di KB-TK Aisyiyah Wonoayu bertujuan untuk meningkatkan mutu pendidikan anak usia dini dengan mengintegrasikan model kelas terbalik dan analisis SWOT untuk pengembangan kelembagaan. Metode pelaksanaan meliputi identifikasi masalah, sosialisasi, pelatihan kepala sekolah dan guru, penerapan teknologi, pendampingan, dan evaluasi. Diawali dengan analisis SWOT untuk mengidentifikasi kekuatan, kelemahan, peluang, dan ancaman sekolah, yang memandu perancangan dan pelaksanaan pendekatan kelas terbalik yang disesuaikan dengan kebutuhan sekolah. Guru dilatih Menyusun modul ajar berbasis flippedclassroom yang memungkinkan siswa belajar di rumah melalui video dan terlibat dalam kegiatan kelas interaktif. Hasil penelitian menunjukkan peningkatan kinerja kepala sekolah sebesar 100%, ditandai dengan keberhasilan analisis SWOT dan revisi visi misi sekolah. Selain itu, 90% guru mengalami

peningkatan dalam pengembangan modul pengajaran dan penggunaan teknologi AI dan aplikasi kelas terbalik. Keberlanjutan program ini diharapkan dapat mendukung kepala sekolah dalam mempersiapkan program sekolah 2025/2026 dan mempertahankan kelas terbalik sebagai strategi pembelajaran yang efektif, sehingga meningkatkan daya saing sekolah.

1 Introduction

Education in the digital era is undergoing a significant transformation, especially in the learning approaches used in schools. One innovative approach that is starting to be widely implemented is the flipped classroom (Bishop & Verleger, 2013; Cavert, 2020; Nouri, 2016). This approach allows students to study the subject matter at home through learning videos before the face-to-face meeting in class (Lee & Lai, 2017; Tomas et al., 2019). Thus, class time can be utilized for discussions, questions and answers, and other interactive activities that enhance students' understanding of previously learned material.

Researchers have conducted several studies on flipped classrooms with effective learning environment designs that foster learning motivation (Rindaningsih et al., 2019), *Synchronous and Asynchronous which produces a matrix of activities carried out by teachers in the classroom and outside the classroom* (Rindaningsih et al., 2021), Framework Project learning model - Flipped bases learning in independent curriculum effective learning in building teacher-student and parent interactions (Rindaningsih et al., 2023a), and the use of the back class apk can build student learning independence (Findawati et al., 2021).

KB-TK Aisyiyah Wonoayu, as a partner in this community service program, faces challenges in improving the quality of learning and school management. Based on interviews with the principal, the learning process remains conventional and has not yet optimized effectiveness both in the classroom and at home. Additionally, teachers face limitations in developing their skills in using technology, which poses a significant obstacle. This situation affects the quality of learning received by students, as they are less actively engaged in both in-class and out-of-

class learning activities. Generally, teachers possess adequate teaching skills; however, their use of technology and effective learning approaches is still suboptimal.

Another issue is the stagnant student enrollment over the years. According to information obtained by the community service team, the number of students each year is as follows: 6 students in the playgroup, 12 students in Kindergarten A, and 14 students in Kindergarten B. The principal also acknowledged that a SWOT analysis has never been conducted as a strategy to understand the school's condition, and the school's vision and mission have not been revised since its establishment.

This is certainly a contradiction to the condition of primary and secondary schools that have accelerated technology to information systems (Adiyono et al., 2024). Meanwhile, education in the era of society 5.0 must have skills in the digital field and institutions can use information (big data) in the digital world (Direktorat Sekolah Dasar. Dikjen PAUD, 2021). The existence of high competition between institutions makes these problems must be resolved so that Aisyiyah Kindergarten is more competitive and useful for the community.The importance of controlled school management (Fajriyah & Rindaningsih, 2024) so as to create quality education and have an impact on public interest (Haryanto et al., 2023).
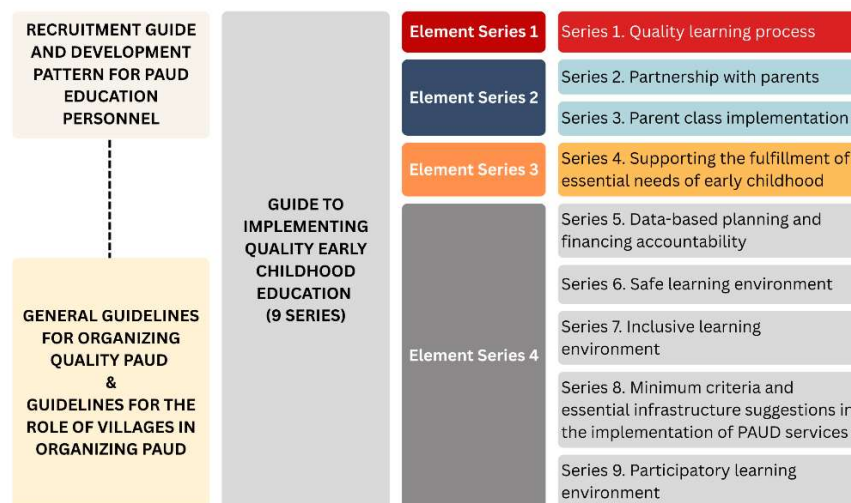

Figure 1. Adoption of a Quality PAUD Program (Kemendikbud, 2022).

In Figure 1 there are 9 series to make quality PAUD. For this reason, an initial study has been carried out as well as mapping the achievements of quality PAUD programs so that based on interviews and agreements between the proposing team and partners, the focus of the problems faced by target partners is in the social and management fields. In the social community, the abdimas team will solve it through learning quality assistance using the Flippedclassroom Model (Tomas et al., 2019) and the creation of a reverse classroom video that bridges in-class and out-of-class learning (Heiss & Oxley, 2021; Rindaningsih et al., 2023b).

KB-TK Aisyiyah Wonoayu is the only Aisyiyah institution in the area with the lowest student enrollment, while its competitors have higher numbers of students. Based on observations and interviews with the school organizers and management, it is evident that empowering human resources is crucial for the institution to recover and improve its competitiveness. Therefore, the researchers plan to conduct training and mentoring for the principal and teachers according to the agreed implementation methods. The objective of this community service program is to improve the quality of early childhood education through the flipped classroom approach and SWOT analysis evaluation. It is expected that through this program, the school will understand how to develop a SWOT analysis (Nasrullah & Rindaningsih, 2023) and adopt innovative and relevant learning approaches tailored to the school's conditions.

2   Method

Community service activities were carried out at KB-TK Aisyiyah Wonoayu, with 5 teachers and 30 students. The method used adopts an inductive approach, starting from the identification of concrete problems in the field, followed by socialization of concepts and skills training, application of technology, intensive assistance, to evaluation and planning for program sustainability. This structure ensures that the solutions offered are relevant to the partners' needs and sustainable in the long term.

Figure 2. Implementation Method.

Figure 2 illustrates the systematic stages of the community service The implementation of the community service program at KB-TK Aisyiyah Wonoayu followed a systematic and structured process, starting from the identification of existing challenges to the formulation of strategies for sustainability. The program began with a comprehensive assessment of the school's current conditions. Through a combination of observations, interviews, and analysis of school data, the team worked to uncover the key issues affecting both the quality of learning and the effectiveness of school management.

Following this, a series of socialization activities were carried out to introduce and explain the concepts underpinning the program. The flipped classroom model was presented as an innovative learning approach, alongside discussions on the importance of strengthening school management. These sessions actively involved teachers, school leaders, and parents to foster a collective commitment to the program's objectives and ensure that all stakeholders were aligned in their understanding and expectations.

Building on the foundation established through socialization, the program advanced to the training and skills development phase. During this stage, principals and teachers participated in targeted workshops designed to enhance their competencies. The training covered practical aspects such as developing digital learning content, applying the flipped classroom methodology, and integrating technology into classroom

practices. Participants also received guidance on preparing area-based learning modules and utilizing various educational applications to support effective teaching and learning processes.

As the participants acquired new skills, the program moved into the application phase, where teachers began creating and implementing digital learning resources. The flipped classroom approach was actively practiced, allowing students to engage with digital learning materials at home and participate in more interactive and collaborative learning activities at school. This shift aimed to maximize classroom engagement and promote active student involvement.

Throughout the implementation, continuous mentoring and evaluation were integral to the program's success. The community service team provided regular support through classroom visits, observation of teaching practices, and constructive feedback to educators. Additionally, systematic evaluations were conducted to monitor the progress of the flipped classroom model and measure improvements in school management practices.

To ensure the long-term impact of the program, sustainability planning became a central focus in the final stage. Strategies were developed to promote continuous improvement, emphasizing the importance of strengthening digital literacy and maintaining effective governance within the school. The school was encouraged to periodically update its SWOT analysis and strategic planning to remain adaptive and resilient in the face of future challenges, ensuring that the benefits of the program would endure beyond its formal completion.

3   Results

The community engagement program implemented at KB-TK Aisyiyah Wonoayu has resulted in significant achievements in improving the quality of early childhood education and school governance. The program was designed inductively and sustainably, involving five interrelated stages: problem identification, socialization and training, implementation and mentoring, evaluation, and sustainability planning. Each stage was

carefully designed to align with the institution's real needs based on the initial assessment results.

Figure 3. Needs Identification and Problem Analysis

During the problem identification phase, two primary challenges emerged as the foundation for designing the intervention program. First, in terms of learning, the educational process was still conventional, dominated by lecture methods. The use of digital technology had not been implemented at all in the teaching-learning process, while teachers' understanding of innovative learning models, particularly the flipped classroom, was still very limited. Second, regarding school management, the institution's vision and mission had not been updated for over eight years. There was no strategic plan document or SWOT analysis to guide institutional development. This condition contributed to the decline in student enrollment in recent years.

As a follow-up to these findings, a SWOT analysis was conducted involving all school stakeholders. The results showed that although the school had strengths, such as qualified teaching staff and support from the Aisyiyah organization, there were serious weaknesses in strategic planning, technology utilization, and institutional competitiveness. Through a SWOT-based strategy formulation, strategic steps were designed in accordance with the school's potential and challenges.

The next phase involved the socialization of the flipped classroom concept and school quality management. This activity was carried out in

two stages: internal socialization with teachers regarding the application of the flipped classroom model, and external socialization involving the principal, management board, and community representatives to discuss institutional planning. Teachers were introduced to video-based learning concepts and methods for integrating home and school learning.

Intensive training was then provided to both teachers and the school principal. Due to limited facilities, some training sessions were conducted at UMSIDA campus. The training materials included the development of environment-based learning modules, the use of the "Balik Kelas" application to upload video materials and monitor students' progress, as well as the production of thematic learning videos accessible to both parents and students. These activities aimed to enhance pedagogical skills as well as the digital literacy of educators.

The implementation of the flipped classroom model was conducted gradually. Children engaged in independent learning at home using teacher-produced videos, accompanied by their parents. At school, they participated in interactive activities such as storytelling, role-playing, and thematic projects in redesigned learning areas. All teachers successfully produced thematic learning videos, and the classroom environment was transformed into an area-based learning setting.

Figure 4. Flipped Classroom Learning Support and Evaluation

To ensure quality implementation, regular mentoring was conducted through classroom observations and periodic evaluations. Evaluation results indicated significant positive changes. The school's vision and mission were updated and officially disseminated for the 2025 period.

The conventional teaching model was successfully transformed into an area-based flipped classroom model, with a success rate of 90%. The use of the Balik Kelas application became routine practice, while parental participation increased to 85%. There is a table of implementation and results as follows:

Table 1. Evaluation Results of the Community Engagement Program at KB-TK Aisyiyah Wonoayu

Indicator	Pre-Program Condition	Post-Program Condition	Achievement (%)	Remarks
Vision and Mission	Outdated (not updated for 8 years)	Updated and socialized for 2025	100%	Excellent
Instructional Model	Conventional (lecture-based)	Flipped Classroom + Area-Based Learning	90%	Good
Technology Use	No technology integration	Active use of the Balik Kelas application	90%	Good
Parental Involvement	Minimal	Active parental support for home learning	85%	Fair to Good
Production of Learning Videos	None	All teachers produced thematic learning videos	100%	Excellent
Classroom Environment	Traditional classroom setup	Redesigned based on area-based learning	100%	Excellent

Inclusive Education	Not yet implemented	Initiated for children with special needs	-	Early stage of implementation

Moreover, inclusive education practices began to be implemented, particularly to provide differentiated support for children with special needs. The learning environment became more friendly, interactive, and collaborative. These changes positively impacted students' enthusiasm for learning and increased active parental involvement.

To ensure the sustainability of the program's benefits, several strategic measures were designed, such as the continuous development of digital content, regular training implementation, integration of the flipped classroom model into the school's annual curriculum, and the preparation of promotional materials to attract new students. Through these strategies, KB-TK Aisyiyah Wonoayu now has a stronger foundation to continue developing and improving the quality of its educational services.

4   Discussion

The SWOT analysis produced a development strategy that positioned the school in the **Strength–Opportunity (S–O)** quadrant. This position indicates that the school has strong internal potential and sufficient external support. These findings are consistent with Chairiyah et al. (2024), who emphasized the importance of integrating SWOT in early childhood education (ECE) management as a reference for formulating adaptive school vision and mission statements. The changes in the school's vision and mission, resulting from strategic discussions involving teachers and school principals, prove that SWOT serves not only as a diagnostic tool but also as an effective instrument for institutional transformation. According to Kusumawati (2022), SWOT analysis serves as a benchmark for institutions to understand the causes of declining student enrollment by reviewing its components. The strengths and opportunities identified in the ECE institution should be optimized to enhance institutional quality, while weaknesses and threats must be

addressed and continuously evaluated to guide future policies that benefit the institution.

A key component of this effort was the implementation of SWOT analysis, which enabled school administrators to identify their strengths, weaknesses, opportunities, and threats. The SWOT analysis was collaboratively conducted by the community service team and TK Aisyiyah Wonoayu. This framework helped the school develop a clear future vision and prioritize efforts based on SWOT findings (Miranti et al., 2021; Munafiah, 2020). The development model that integrates flipped classroom and SWOT can be replicated in other early childhood institutions, especially within the Aisyiyah network. It reinforces the principles of Holistic-Integrative ECE and supports digital literacy goals in educational institutions as targeted within the Society 5.0 era (Direktorat Sekolah Dasar. Dikjen PAUD, 2021).

The results showed that 90% of teachers successfully developed video-based learning modules and implemented them through the *Balik Kelas* application. This marks a significant increase in the use of technology in early childhood learning. The teacher training and continuous mentoring conducted throughout this program successfully transformed the teachers' role from conventional instructors into active facilitators in thematic area-based learning. The training ensured that teachers could produce video content that supported learning objectives. The core of the program was the introduction and training on the Flipped Classroom model (Cavert, 2020; Moraros et al., 2015). This model, which leverages technology to deliver content outside of traditional classroom settings, has been proven to increase student engagement and improve learning outcomes (Nikitova et al., 2020).

According to Fitrianingtyas et al (2021), training on developing learning media—particularly instructional videos—is essential for ECE educators. Their research found that through such training, teachers were able to understand the theory of video creation, recognize the benefits of educational videos, determine appropriate content, follow procedures for producing engaging video content, and utilize features in the CapCut application.

In line with this, positive aspects of the flipped classroom from the learners' perspective include having video support for home learning, developing self-directed learning habits, and the flexibility to adapt to individual learning speeds. However, some categories also highlight negative perceptions, such as difficulties in comprehension, the need for teacher explanation, time pressure, and time management challenges. Our findings resonate with those of Wolff & Girnat (2024), who noted that positive experiences with flipped classrooms are often accompanied by reported difficulties. Therefore, it is crucial that teachers maintain the ability to guide student understanding both at home and in the classroom.

The increased involvement of parents in supporting their children's learning at home and the use of technology—such as the *Balik Kelas* application—demonstrate the success of the program in creating a three-way synergy between teachers, students, and parents. This collaboration is also emphasized by Latifah & Rindaningsih (2023) and Rindaningsih et al. (2021), who argued that flipped classrooms are most effective when digital platforms enable smooth communication among all stakeholders. Observations showed that the educational videos created by teachers were not only used once but became recurring learning resources, extending the duration and depth of student learning both at home and in school.

This is consistent with research by Khayati et al. (2025), which found that the implementation of flipped learning in ECE involves two key stages: independent learning at home and interactive activities in the classroom. In the first stage, children are introduced to learning materials through educational videos, storybooks, or exploratory activities with parental guidance. The second stage focuses on classroom activities such as role-playing, interactive discussions, experiments, and group work to help children concretely understand the concepts. Thus, parental involvement at home becomes essential to ensure intense interaction and communication, enabling continuity in learning both at school and at home.

These findings support studies by Kamila et al. (2023) and Wolff & Girnat (2024), which indicate that online flipped learning increases

student engagement and deepens conceptual understanding. In the context of early childhood education, parental involvement plays a pivotal role. This program demonstrated successful collaboration between teachers and parents, contributing significantly to the effectiveness of the flipped classroom model.

Despite the program's effectiveness, several challenges were encountered, such as limited internet access in schools and disparities in digital literacy between teachers and parents. The training approach conducted at UMSIDA served as a strategic solution to bridge these infrastructural and resource gaps. Strengthening strategies were carried out through regular mentoring and the use of lightweight, accessible applications.

This supports findings by Farida & Rindaningsih (2024), who assert that through digital-based training and human resource development, educational institutions can create adaptive, innovative, and competitive learning environments. The success of implementing such strategies depends not only on technology, but also on the institution's commitment to empowering human resources, fostering a culture of learning, and ensuring sustainability through continuous evaluation and improvement. Soft skills among educators also influence educational quality. Competent teachers play a vital role in achieving high-quality human resources capable of delivering optimal results (Dwi Astuti et al., 2023).

5   Conclusion

This community service program successfully improved the quality of early childhood education at KB-TK Aisyiyah Wonoayu through the implementation of the flipped classroom model and strategic planning based on SWOT analysis. The program effectively enhanced teaching practices, with 90% of teachers producing video-based learning materials, a significant shift in teacher roles toward facilitators, and the revision of the school's vision and mission aligned with institutional strengths and opportunities. Strong collaboration among teachers, parents, and students also strengthened the learning process both at school and at home. The institution's position in the Strength–

Opportunity (S–O) quadrant highlights its high potential for sustainable development, not only in improving instructional quality but also in school management and branding.

Despite these achievements, further efforts are needed to support sustainability, including the development of measurable indicators such as teacher competency levels, the quantity and utilization of learning videos, and student engagement metrics. For future programs, it is recommended to formulate clear guidelines for replicating this model in other early childhood institutions, intensify parental involvement, and foster an institutional culture of continuous innovation. Commitment to ongoing human resource development will be essential to ensure the long-term success of digital transformation in early childhood education.

6   Acknowledgment

7   Reference

Adiyono, A., Hayat, E. W., Oktavia, E. D., & Prasetiyo, N. T. (2024). Learning interaction in the digital era: Technological innovations and education management strategies to enhance student engagement. *Journal of Research in Instructional*, *4*(1), 205–221. https://doi.org/10.30862/jri.v4i1.333

Cavert, M. S. (2020). *Why Flip the Medical Resident Classroom? A Pilot Study in Singapore*. Springer Singapore. https://doi.org/10.1007/978-981-15-4171-1

Chairiyah, S. S., Hanifah, E., Rotua, E., Sitorus, B., & Khayati, N. (2024). Analisis Strength , Weakness , Opportunities , and Threats dalam Perencanaan Peningkatan Mutu Pendidikan di Madrasah Tsanawiyah. *Edukatif : Jurnal Ilmu Pendidikan*, *6*(5), 6183–6196.

https://doi.org/10.31004/edukatif.v6i5.7636

Direktorat Sekolah Dasar. Dikjen PAUD, P. M. (2021). *Menyiapkan Pendidik Profesional di Era Society 5.0*. Kemendikbud Ristek. https://ditpsd.kemdikbud.go.id/artikel/detail/menyiapkan-pendidik-profesional-di-era-society-50

Dwi Astuti, R., Mahdalena Leksana, D., & Hida Febriani, N. (2023). Peningkatan Kompetensi Guru PAUD melalui Pelatihan MenciptakanEducational Cloth Book. *Amalee : Indonesian Journal of Community Research and Engagement*, *4*(1), 283–292. https://doi.org/10.37680/amalee.v4i1.2090

Fajriyah, A., & Rindaningsih, I. (2024). Human Resource Management in Islamic Schools. *Academic Journal Research*, *2*(1), 30–39. https://doi.org/10.61796/acjoure.v2i1.44

Farida, Y., & Rindaningsih, I. (2024). Analisis Sistematis Literatur tentang Transformasi Pelatihan dan Pengembangan Guru sebagai SDM pada Lembaga Pendidikan di Era Digital. *Jurnal Akademik Ekonomi Dan Manajemen "*, *1*(4), 602–607. https://doi.org/0.61722/jaem.v1i4.3653

Findawati, Y., Rindaningsih, I., & Hastuti, W. D. (2021). Development of Flipped Learning Based on Android for Elementary School. *Proceedings of the 1st Annual International Conference on Natural and Social Science Education (ICNSSE 2020)*, *547*(Icnsse 2020), 362–365. https://doi.org/10.2991/assehr.k.210430.055

Fitrianingtyas, A., Zuhro, N. S., Jumiatmoko, Nurjanah, N. E., & Sholeha, V. (2021). Efektivitas Pelatihan Pembuatan Video Pembelajaran Menggunakan Smartphone bagi Pendidik PAUD. *Murhum : Jurnal Pendidikan Anak Usia Dini*, *2*(2), 28–37. https://doi.org/10.37985/murhum.v2i2.48

Haryanto, B., Fahyuni, E. F., & Alimova, M. T. (2023). Branding Matters: Private Islamic Schools Struggle to Attract Students Under Educational Zoning. *Atlantis Press SARL*, *1*, 313–321. https://doi.org/10.2991/978-2-38476-048-0_36

Heiss, E. M., & Oxley, S. P. (2021). Implementing a flipped classroom approach in remote instruction. *Analytical and Bioanalytical Chemistry*, *413*(5), 1245–1250. https://doi.org/10.1007/s00216-020-03147-w

Kamila, H. N., Faslah, R., & Sholikhah. (2023). The Use of Online-Based Flipped Classroom Learning Models in Increasing Student Interest and Learning Outcomes. *Jurnal Pendidikan Ekonomi, Perkantoran Dan Akuntansi*, *4*(1), 205–218. https://doi.org/10.21009/JPEB.007.2.3

Kemendikbud. (2022). Pedoman Umum Penyelenggaraan Pendidikan Anak Usia Dini Berkualitas. *Kementerian Pendidikan, Kebudayaan, Riset Dan Teknologi*, *1*, 79.

Khayati, N., Rohma, S., & Santyani, Wi. (2025). Inovasi Model dan Strategi Pembelajaran Flipped Learning dalam Pendidikan Anak Usia Dini. *Kumara Cendekia*, *13*(1), 80–89. https://doi.org/10.20961/kc.v13i1.95300

Kusumawati, E. (2022). Analisis SWOT Faktor Penyebab Penurunan Jumlah Peserta Didik Lembaga PAUD di Kabupaten Bogor. *Tarbiatuna: Journal of Islamic Education Studies*, *2*(2), 88–96. https://doi.org/10.47467/tarbiatuna.v2i2.660

Latifah, U., & Rindaningsih, I. (2023). Implementasi Flipped Classroom dalam Mendukung Merdeka Belajar untuk Meningkatkan Kemandirian Belajar. *Jurnal Papeda: Jurnal Publikasi Pendidikan Dasar*, *5*(2), 156–166. https://doi.org/10.36232/jurnalpendidikandasar.v5i2.4447

Lee, K., & Lai, Y. (2017). Facilitating higher-order thinking with the flipped classroom model: a student teacher's experience in a Hong Kong secondary school. *Research and Practice in Technology Enhanced Learning*, *12*(1), 8. https://doi.org/10.1186/s41039-017-0048-6

Miranti, Y. S., Syamsuddin, M. M., & Fitrianingtyas, A. (2021). Analisis Manajemen Pendidikan Anak Usia Dini Menggunakan Metode Evaluasi Swot Di Paud It Nur Hidayah. *Kumara Cendekia*, *9*(4), 243. https://doi.org/10.20961/kc.v9i4.54966

Moraros, J., Islam, A., Yu, S., Banow, R., & Schindelka, B. (2015). Flipping for success: Evaluating the effectiveness of a novel teaching approach in a graduate level setting. *BMC Medical Education*, *15*(1), 1–10. https://doi.org/10.1186/s12909-015-0317-2

Munafiah, N. (2020). Perencaan Strategik Melalui Analisis SWOT Di Tkit At-Taqwa Grabag Magelang. … *Athfal: Jurnal Pendidikan Islam Anak Usia Dini*, *4*(2), 148–159. https://doi.org/10.19109/ra.v4i2

Nasrullah, M., & Rindaningsih, I. (2023). Improving Educator Recruitment Management in Primary and Secondary Education Institutions. *Middle European Scientific …*, *32*, 71–80. https://doi.org/10.47494/mesb.v32i.1658

Nikitova, I., Kutova, S., Shvets, T., Pasichnyk, O., & Matsko, V. (2020). "Flipped learning" methodology in professional training of future language teachers. *European Journal of Educational Research*, *9*(1), 19–31. https://doi.org/10.12973/eu-jer.9.1.19

Nouri, J. (2016). The flipped classroom: for active, effective and increased learning – especially for low achievers. *International Journal of Educational Technology in Higher Education*, *13*(1). https://doi.org/10.1186/s41239-016-0032-z

Rindaningsih, I., Arifin, B. U. B., & Mustaqim, I. (2023a). Empowering Teachers in Indonesia: A Framework for Project-Based Flipped Learning and Merdeka Belajar. *Proceedings of the International Conference on Intellectuals' Global Responsibility (ICIGR 2022)*, *1*, 177–184. https://doi.org/10.2991/978-2-38476-052-7_20

Rindaningsih, I., Arifin, B. U. B., & Mustaqim, I. (2023b). *Empowering Teachers in Indonesia: A Framework for Project-Based Flipped Learning and Merdeka Belajar* (Vol. 1). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-052-7_20

Rindaningsih, I., Findawati, Y., Hastuti, W. D., & Fahyuni, E. F. (2021). Synchronous and Asynchronous With Flipped Learning Environment in Primary School. *PrimaryEdu - Journal of Primary Education*, *5*(1), 33. https://doi.org/10.22460/pej.v5i1.1883

Rindaningsih, I., Hastuti, W. D., & Findawati, Y. (2019). Desain Lingkungan Belajar yang Menyenangkan Berbasis Flipped Classroom di Sekolah Dasar. *Proceedings of the ICECRS*, *2*(1), 41. https://doi.org/10.21070/picecrs.v2i1.2452

Tomas, L., Evans, N. (Snowy), Doyle, T., & Skamp, K. (2019). Are first year students ready for a flipped classroom? A case for a flipped learning continuum. *International Journal of Educational Technology in Higher Education*, *16*(1). https://doi.org/10.1186/s41239-019-0135-4

Wolff, B., & Girnat, B. (2024). Student perspectives on the flipped classroom concept in secondary math lessons. *Discover Education*. https://doi.org/10.1007/s44217-024-00287-4